

## AMENDED CLAIMS

1. (Original) Rapid connection/assembly system, for lift guides, where each guide (1) includes a head-core (13) where a precision finish has been carried out on its upper surface of reference (11) (OX-axis) and a precision finish on its side surfaces of reference (12) (OY-axis) and a flange 814) on each side; characterized because:
  - a) at least one connection point (P) is determined on each flange (14) of each guide (1), situated at a predetermined set height /h) with respect to the upper surface of reference (11) of the head (813) and at a predetermined set distance (a) with respect to the respective side surface of reference (12) of the head (13);
  - b) a machine finish (141) open to the outside is placed on the flanges (14) around each connection point (P);
  - c) some connection plates (2) are placed, each one of which extends between the flanges (14) of each side of at least two guides (1); this connection plate (2) is organized into two plate parts (2a) which match the flanges (14) of each side and which can be moved in some tightening means (2b), (21), (22) mounted on these plate parts (2a), which, when moved closer together, tighten these plate parts (2a) laterally against the flanges (14);
  - d) on each plate part (2a) there are alignment elements (3), (241) which centrally and in a combined way match the machined parts (141) on the connection points (P) of the flanges), so that when the plate parts (2a) are tightened against the flanges (14) all the connection points (P) of the flanges (14) of each side of the guides (1) remain in a straight line (I).

2. (Original) Rapid connection/assembly system, for lift guides, according to previous claim, characterized because:

- a) each flange (14) forms some open machined parts (141) in origin; these machined parts are placed in opposing pairs: one or several pairs spaced out at any distance ( $d_i$ ) the last of these pairs being machined at any distance ( $d_2$ ) from the end of the guide (1);
- b) the upper surface (11) and the side surfaces (12) of the head (13) are used as reference to position in origin the open machined parts (141), whose centers are the connection points (P);
- c) a connection plate (2) is placed, organized into two plate parts (2a) with tightening means (2b) to bring them closer/separate them to a maximum distance ( $d_3$ ), and which form some alignment elements (241) in origin, which are distributed into at least two pairs separated from each other by a distance ( $d_4$ ); these alignment elements (241) form the retention means which, integrated into the actual connection plate (2) and dependent upon this, attach is securely and jointly to the flanges (14) of two guides (1) to be joined; so that for the rapid connection/assembly, it is sufficient to place the machined parts (141) opposite each other, (241) of the guides (1) and compress longitudinal-parts (2a) of this connection plate (2) closer together.

3. (Original) Rapid connection/assembly system, for lift guides, according to claim 2, characterized because the alignment elements (241) are distributed into at least four pairs separated from each other, two by two by a distance (ds).
4. (Currently Amended) Rapid connection/assembly system, for lift guides, according to claim 2 ~~claims 2 and 3~~, characterized because in the relationship between distances (di), (d2>, (d4>, (ds) the following must be satisfied:

$$d4 = 2d2 \text{ y } ds = di$$

5. (Currently Amended) Rapid connection/assembly system, for lift guides, according claim 1 ~~to previous claims~~, characterized because each plate part (2a) is an elongated "U"-shaped profile with asymmetrical flanges, one of them bent towards the interior, and couples of conformations (20) opposite each other, to house the tightening means (2b).
6. (Original) Rapid connection/assembly system, for lift guides, according to claim 5, characterized because these alignment elements (241), which form the integrated retaining means and dependent on the base plate (2) are protuberances that are dimensionally combined with the open machined parts (141) and forming the bend of one of the asymmetric flanges of these plate parts (2a).

7. (Currently Amended) Rapid connection/assembly system, for lift guides, according to claim 1 ~~previous claims~~, characterized because the aforementioned tightening means (2b) are sets of stud (21) and nut (22), housed in opposing conformation sets (20) on the plate parts (2a) so that the maximum separation distance ( $d3>$  between plate parts (2a) is delimited, respectively, by the nut (22) and the head (21b) of the stud (21).
8. (Original) Rapid connection/assembly system, for lift guides, according to claim 5, characterized because these conformations (20) are, in each set, an anti-rotation opening (20a) and an open box (20b).
9. (Currently Amended) Rapid connection/assembly system, for lift guides, according to claim 1 ~~claims 1 to 4~~, characterized because the plate parts (2a) are solid, with an extension wall on whose end the alignment elements (241) are placed forming a bend.
10. (Original) Rapid connection/assembly system, for lift guides, according to claim 9, characterized because these conformations (20) are through openings.

11. (Original) Rapid connection/assembly system, for lift guides, according to claim 1, characterized because:

- a) each flange (14) forms some machined parts (141) in origin; these machined parts are placed in opposing pairs: one or several pairs are separated between each other by any distance ( $d_i$ ) the last of these pairs being machined at any distance ( $d_2$ ) from the end of the guide (1);
- b) the upper surface (11) and side surfaces (12) of the head (13) are used as reference to position the open machined parts (141) in origin, whose centers are the connection points (P);
- c) there is a connection plate (2) organized into two plate parts (2a) with tightening means (2b) bring them closer together/further apart, to a maximum distance ( $d_3$ );
- d) there are alignment elements (3) pre-mounted on these plate parts (2a) that can be moved closer; so that for the rapid connection/assembly it is sufficient to position the open machined parts (141) of the guides (1) opposite the alignment elements (3) pre-mounted on the connection plate (2), then compressing the plate parts (2a) of this connection plate (2) when moved closer to.

12. (Original) Rapid connection/assembly system, for lift guides, according to claim 11, characterized because the plate parts (2a) are solid and the alignment elements (3) are spigots inserted into these plate parts (2a) so that they interrupt the continuity of some longitudinal guides (25) that cover some continuous chamfers (15) that attach to each other the open machined parts (141) of the guides (1) to be connected.
13. (Currently Amended) Rapid connection/assembly system, for lift guides, according to claim 1 ~~claims 1 to 4~~, characterized because these alignment elements (241) are die-stamped flanges in the core of these plate parts (2a).
14. (Original) Rapid connection/assembly system, for lift guides, according to claim 13, characterized because these die-stamped flanges (241) are conformed in the core of the plate parts (2a).